

ABSTRACT OF THE DISCLOSURE

In order to equalize the intensity of light emitted by display elements on a display device, a plurality of current-drive circuits are connected in cascade through two terminals of each of the current-drive circuits and each of the plurality of current-drive circuits comprises a reference current generation section including a reference resistor R_r and a plurality of current drive sections. The reference resistor R_r is inserted between the two terminals provided in 5 each of the plurality of current-drive circuits and the reference resistors R_r of the plurality of current-drive circuits and an external reference current source are connected in cascade 10 arrangement through the two terminals provided in each of the plurality of current-drive circuits. Reference current I_{REF} sunk by the external reference current source and flowing through 15 the reference resistor R_r causes a voltage drop V_R across the reference resistor R_r and the voltage drop V_R is applied across a current adjustment resistor to allow internal reference current 20 to flow inside the current-drive circuit. In response to an image signal, the current-drive circuit outputs current, the amount of which is determined by multiplying each of a plurality 25 of internal reference currents by an optional factor and summing currents resulting from multiplication of each of the plurality of internal reference currents, to the light emitting elements of the display panel. Since the magnitude of the internal reference current flowing inside the current-drive circuit can be varied by varying the value of the current adjustment resistor of the current-drive circuit, gamma correction can be applied

to drive current (i.e., current determined by the multiplication
30 of each of the plurality of internal reference currents) with
high accuracy.